

141764

Page 1

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 2/11/2016 **Start Qty:** 1.00 ***1***

Required Date: 2/18/2016 **Req'd Qty:** 1.00 ***1***

Reference:

Approvals: Process Plan: MLG Date: FEB 11 2016

Tooling:

Date:

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3186	Rev E

0.00

100

Small Fab

Small Fab

Memo

0.05

Small Fab

1-Trim door to fit spacepod before drill holes and cut out slots for latch as per dwg D3186 (D3186-4 detail)

Primer #A33641 DAS
41 16-8-30

110

QC5- Inspect part completeness to step on W/O	0.00
---	------

110

QC

Memo

0.00

Quality Control

120

Identify as per dwg & Stock Location: CA2 0.00

120

Packaging

Memo

0.00

Packaging

Location : CA2

DAS
02
9-81

16-08-17

Pto +

DAS
16
9-89

16/02/31

DAS
02
9-89

16-08-17

DQA:

Date: 09/22/2016



QA Closed:

Date:

SEP 02 2016

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐

Work Order: <u>141764</u> Part No. <u>03186-4</u> NCR No. <u>16-5995</u>		DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Water Jet ☐ Engineering ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Quality ☐ Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ Large Fab ☐ Composite ☐ Supplier ☒					
Date :		Step #:		QTY Effective : <u>1</u>		MRB (QSI042) Approval			
Description Work Order Deviation <u>Form 10</u> Remove repair by supplier and perform ^{was not} repair as per PIN 0350-600 3.4.3 and QSI 037 9.1 240 SD 22-0				Disposition <u>CARRY OUT</u> Latch hole repair performed by supplier was not performed as PER per PIN-0350-600 3.4.3 and QSI 037 9.1 Reference NCR 16-5995 16/08/30				Completed By <u>@ FDC NCR 16-5995</u> Lead hand / Supervisor Approval Verification <u>5/16/08/30</u> QC / QA Coordinator Approval <u>5/16/08/30</u>	
Root Cause Environment ☐ No Re-verification ☐ Design ☐ Operator ☐ Doc/Data ☐ Offset/Setup ☐ Equip/Tooling ☐ Supplier ☐ Handling/Pre ☐ Training ☐ Material ☐ Use for Testing ☐ Internal Transport ☐ Poor Information ☐ Tribal Knowledge ☐ Rushing ☐ LOA ☐ Product Improvement ☐ Substation ☐ Process Improvement ☐ Past Expiry Date ☐ Manufacturing Process ☐ Misidentified ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Temperature/Cure ☐ Power Loss/Surge ☐ Positioned Wrong ☐ Bending ☐ Set-up ☐ Folio/Program ☐ Outside Dimensions ☐ Centre Not Concentric ☐ BOM/Route ☐ Grain ☐ Over/Under tolerance ☐ Cracks ☐ Broken/Damage/Defect ☐ Weld ☐ Part Incorrect ☐ Crimp/Kink/Ripple/Wave ☐ Inspection Incomplete/Unqualified ☐ Wrong Stock Pulled ☐ Part Lost/Missing ☐ Cuffs ☐ Contamination ☐ Out of Sequence ☐ Part Moved ☐ Crushing ☐ Countersink ☐ Off-set ☐ Drawing ☐ Heat Treat ☐ Cut Too Short ☐ Mislabeled ☐ Finish ☐ Wave/Twist in Tube ☐ Instructions Incomplete/Unclear ☐ Fit/Function ☐ Misread ☐ Marks/Chatter ☐ Drill Holes ☐ Misaligned/off center ☐ Turning Sequence ☐							
OTHER :									

Work Order ID 141764

Thursday, February 11, 2016 10:23:36 AM

141764

Page 2

Item ID: D3186-4 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Spacepod Door, RH
Start Date: 2/11/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 2/18/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC21- Final Inspection - Work Order Release	0.00				DAS 21 9-89		SEP 01 2016	
130 QC	Memo	0.00							
Quality Control									

em 16/08/31

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																														
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																										
BAC TS JAL																																																																		
Root Cause		FAULT CATEGORY																																																																
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :				
Misidentified ☐	Past Due ☐																																																																	

Picklist Print

Thursday, February 11, 2016 10:23:39 AM

Page 1

Work Order ID: 141764

141764

Parent Item: D3186-4

D3186-4

Parent Item Name: Spacepod Door, RH

Start Date: 2/11/2016

Required Date: 2/18/2016

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev:A New Issue 07-01-11 EC

IPP rev.B revD 07.03.07 ec

IPP Rev:C

10-08-11 added trim door before drilling DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3186-2P		Purchased	No			100	Each	0.0000	1	1			
D3186-2P									**				
Spacepod Door													

3 141767

DAS
02
2.00

16-08-16

~~16-08-16~~

DQA: _____ Date: _____



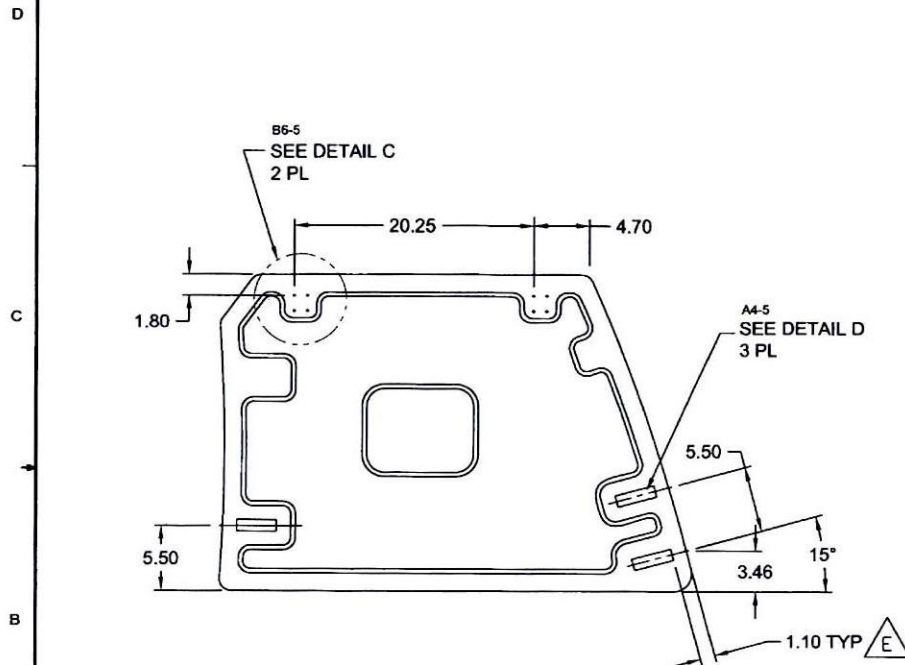
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

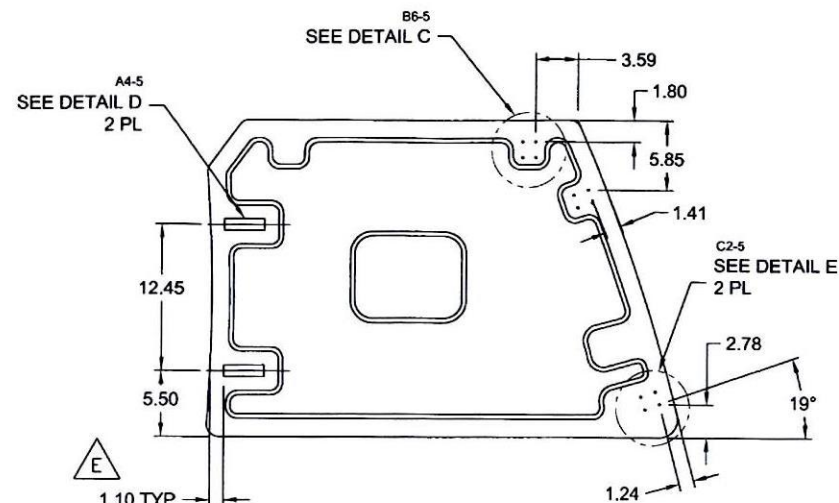
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
240 50 240								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

8 7 6 5 4 3 2 1



D3186-1 SPACEPOD DOOR, LH
MAKE FROM D3186-1M



D3186-3 SPACEPOD DOOR, LH
MAKE FROM D3186-1M

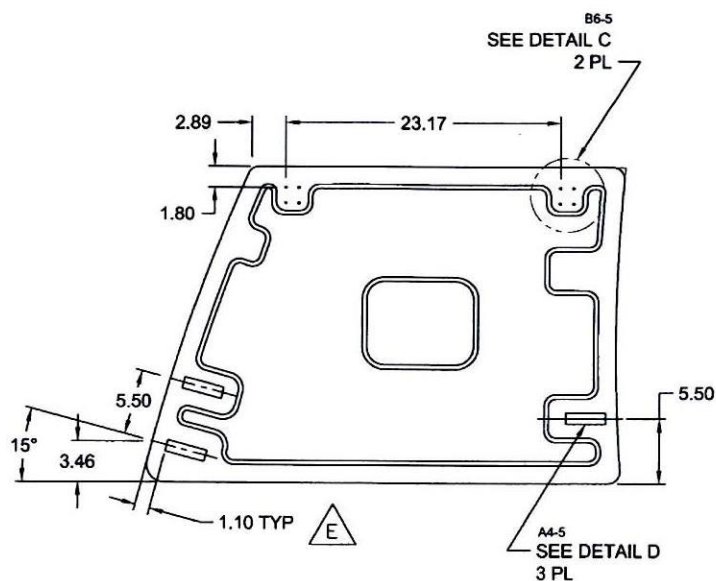
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2009-09-09

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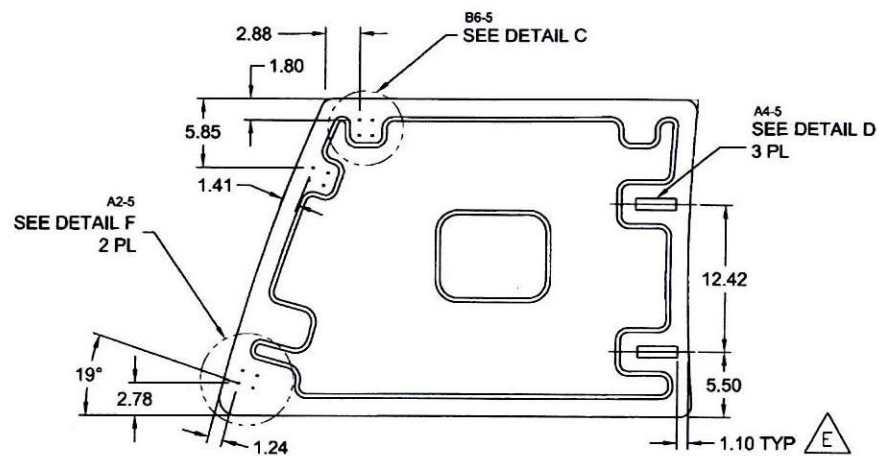
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 141764 MJS
1602-11

E	DRAWING UPDATED TO CURRENT STANDARDS. 1.10 WAS 0.98 (ZN B5-1, B4-1, B7-2, B1-2); R0.12 WAS 0.125 (ZN B5-5); REF PAR 09-026		RF	09.07.08
D	UPDATE DIMENSIONS		LE	07.02.22
C	REMOVED D0600-XXX LABELS		LE	06.12.13
B	DIMS UPDATED TO MATCH PRODUCT FOAM PATTERN UPDATED D3186-1M/-2M/-3/-4 ADDED		LE	06.09.25
A	NEW ISSUE		CP	03.03.27
REV.	DESCRIPTION		BY	DATE
DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. REV. E D3186 SHEET 1 OF 5 TITLE SCALE SPACEPOD DOOR NTS COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND UNCLASSIFIED AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		
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CHECKED	RF			
MFG. APPR.	RF			
APPROVED	RF			
DE APPR.	RF			
DATE	09.07.08			



D3186-2 SPACEPOD DOOR, RH
MAKE FROM D3186-2M



D3186-4 SPACEPOD DOOR, RH
MAKE FROM D3186-2M

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2008-09-09

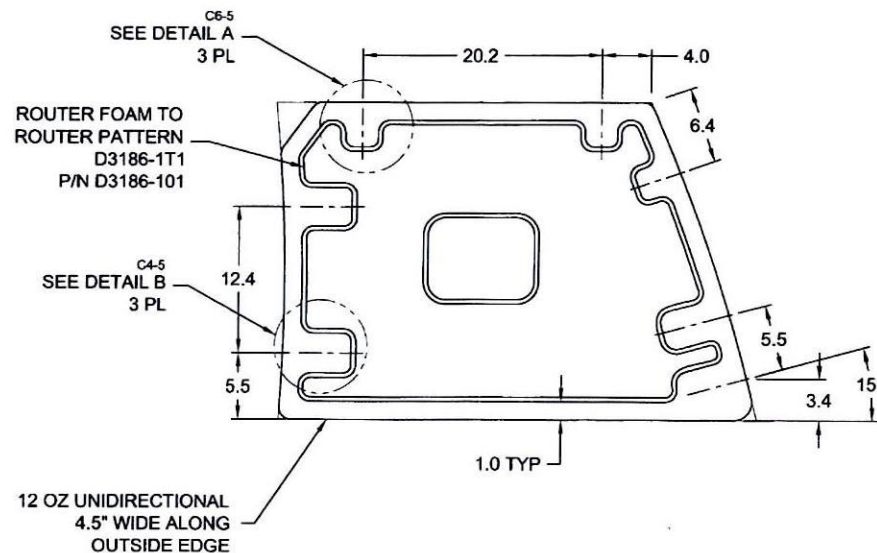
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A

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MFG. APPR.	W	D3186	SHEET 2 OF 5
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DE APPR.	W	SPACEPOD DOOR	NTS
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MAIN LAYUP

9 OZ SATIN (9 SQ FEET)
 9 OZ SATIN (9 SQ FEET)
 FOAM
 9 OZ SATIN (9 SQ FEET)
 12 OZ UNIDIRECTIONAL
 9 OZ SATIN (9 SQ FEET)
 RESIN (35-45% BY WEIGHT)
 PEEL PLY



D3186-1M SPACEPOD DOOR AS MOLDED

NOTES:

1) MATERIAL:

RESIN = EPOCAST 50-A/9816 OR DERAKANE 470-36/411/510A40
 FOAM = 3/8", A500 CORE-CELL OR DIVINYCELL OR AIREX OR KLEGECELL
 FIBRE = 9.7 OZ 7781 WEAVE "S" GLASS ("9 OZ SATIN")
 12 OZ UNIDIRECTIONAL FIBERGLASS ("12 OZ UNIDIRECTIONAL")
 LAMINATE PER DART QSI 006 4.0
 LAMINATION SCHEDULE PER THIS DRAWING

2) FINISH: FINISH INSIDE/OUTSIDE WITH DUPONT HIGHBUILD GREY PRIMER 1144-S

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

7) WEIGHT: 7.0 lbs

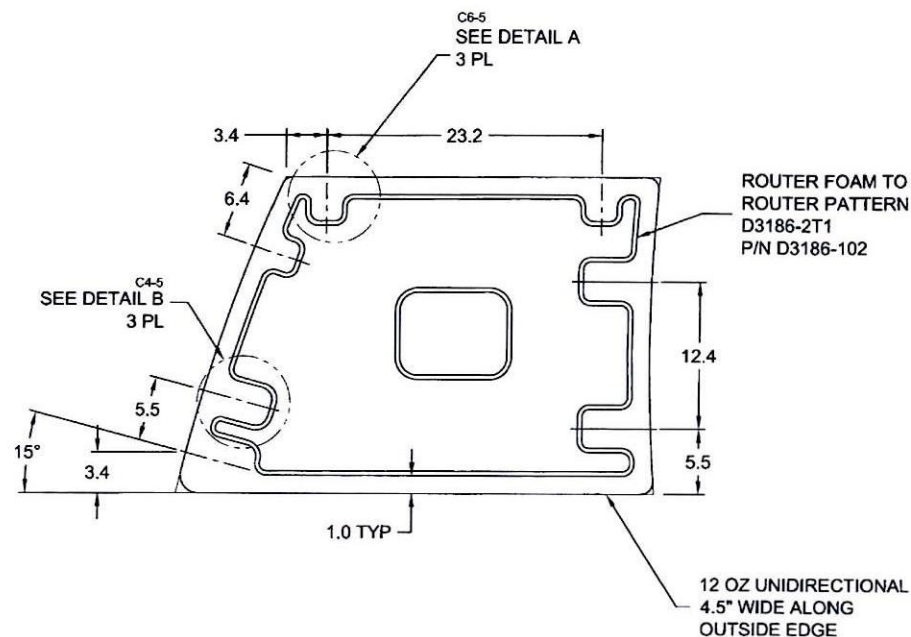
8) USE MOLD DT8005 FOR DOOR LAYUP

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 2008-09-08

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MFG. APPR.		D3186	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SPACEPOD DOOR	NTS
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MAIN LAYUP

9 OZ SATIN (9 SQ FEET)
9 OZ SATIN (9 SQ FEET)
FOAM
9 OZ SATIN (9 SQ FEET)
12 OZ UNIDIRECTIONAL
9 OZ SATIN (9 SQ FEET)
RESIN (35-45% BY WEIGHT)
PEEL PLY



NOTES:

1) MATERIAL:

RESIN = EPOCAST 50-A/9816 OR DERAKANE 470-36/411/510A40
FOAM = 3/8", A500 CORE-CELL OR DIVINYCELL OR AIREX OR KLEGECELL
FIBRE = 9.7 OZ 7781 WEAVE "S" GLASS ("9 OZ SATIN")
12 OZ UNIDIRECTIONAL FIBERGLASS ("12 OZ UNIDIRECTIONAL")
LAMINATE PER DART QSI 006 4.0
LAMINATION SCHEDULE PER THIS DRAWING

2) FINISH: FINISH INSIDE/OUTSIDE WITH DUPONT HIGHBUILD GREY PRIMER 1144-S

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

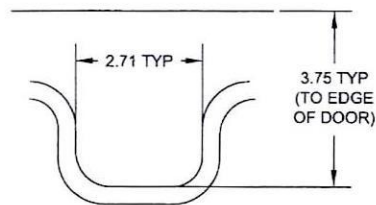
7) WEIGHT: 7.0 lbs

8) USE MOLD DT8006 FOR DOOR LAYUP

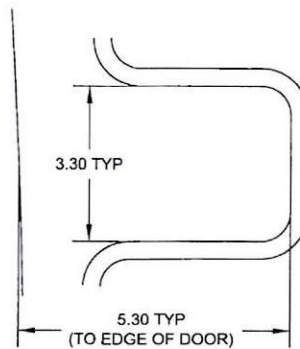
D3186-2M SPACEPOD DOOR AS MOLDED

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2009-09-09
MP

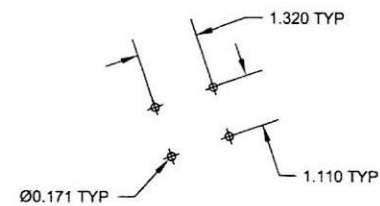
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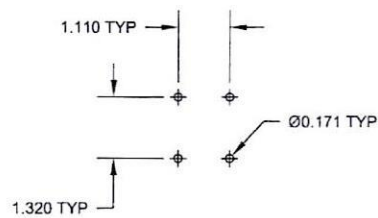
DETAIL A D6-3
SCALE 4X D4-4



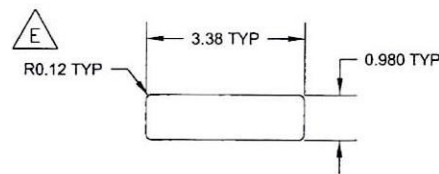
DETAIL B C6-3
SCALE 4X C6-4



DETAIL E C1-1
SCALE 4X

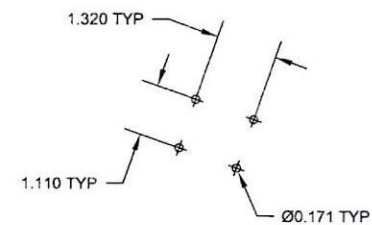


DETAIL C D7-1
SCALE 4X D3-1
D6-2
D3-2



NOTE: ENSURE THAT CUTOUT IS PERPENDICULAR TO EDGE OF DOOR

DETAIL D C5-1
SCALE 4X D4-1
B6-2
C2-2



DETAIL F C4-2
SCALE 4X

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2009-09-09

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DE APPR.		SPACEPOD DOOR	NTS
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